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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/577,758

04/28/2006

Lisebeth Van Pieterse

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PHILIPS INTELLECTUAL PROPERTY & STANDARDS

P.O. BOX 3001

BRIARCLIFF MANOR, NY 10510

EXAMINER

VERDERAME, ANNA L

ART UNIT

PAPER NUMBER

1795

MAIL DATE

DELIVERY MODE

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/577,758	<b>Applicant(s)</b> VAN PIETERSON ET AL.	
	<b>Examiner</b> ANNA L. VERDERAME	<b>Art Unit</b> 1795	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 28 April 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 April 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### DETAILED ACTION

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 12 provides for the use of an optical data storage medium, but, since the claim does not set forth any steps involved in the method/process, it is unclear what method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced. The claim recites the use of an optical storage medium but does not recite any active positive steps delimiting how the use is actually practiced.

Claim 12 is rejected under 35 U.S.C. 101 because the claimed recitation of a use, without setting forth any steps involved in the process, results in an improper definition of a process, i.e., results in a claim which is not a proper process claim under 35 U.S.C. 101. See for example *Ex parte Dunki*, 153 USPQ 678 (Bd.App. 1967) and *Clinical Products, Ltd. v. Brenner*, 255 F. Supp. 131, 149 USPQ 475 (D.D.C. 1966).

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1 and 7-11 are rejected under 35 U.S.C. 102(b) as being anticipated by Horie et al. 2003/0214857.

Claims 1,2 and 7-9 are anticipated by examples 1-2(0204-0205).

Claims 1,2, and 7-11 are anticipated by example 15(0274-0278).

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Horie et al. 2003/0214857.

In example 11, Horie et al. teaches an optical recording medium comprising a 95 nm first protective layer of ZnS-SiO<sub>2</sub>, an (Sb<sub>0.92</sub>Sn<sub>0.08</sub>)<sub>0.77</sub>Ge<sub>0.15</sub>In<sub>0.08</sub>(70.84% Sb, 6.16%Sn, 15% Ge, and 8% In), a second protective layer of ZnS-SiO<sub>2</sub> having a thickness of 27 nm, a GeN layer having a thickness of 3nm and an Ag reflective layer having a thickness of 200 nm(table 3). This recording composition falls outside the applicant's recited range. It is the position of the examiner that the 3nm thick GeN layer acts as an anti-sulfuration layer between the sulfur containing upper protective layer and the Ag reflective layer.

In example 8 a recording composition having 64% Sb, 16% Sn, 18% Ge, and 2% Ag is taught. This recording composition falls within the applicant's recited range. A general formula for the recording composition according to this invention is taught in the abstract.

Use of SiN as the dielectric material for the protective layers is taught at (0138). Nitrides of Hf, Si, or Ge as materials to form the protective layer are taught at (0137). Oxides of Ta, In, or Sn are also taught at (0137). Thicknesses for the upper-protective layer range from 1-200nm(0143).

The most preferable thicknesses for the recording layer are disclosed to be in the range from 10-20nm(0125). Recording layers having a thickness in the range of 10-14 nm would meet the limitations of instant claim 4 and would represent the most preferable range recited by Horie et al.

Recording speeds as high as 38.4m/s are disclosed for inventive examples(0317).

The ability to use a thicker layer of a more conductive material as opposed to using a thinner layer of a less conductive material does not constitute an unexpected result.

It would have been obvious to one of ordinary skill in the art to modify the optical recording medium taught in example 11 of Horie et al. by using the phase-change composition of example 8 and forming the recording layer to have a thickness of from 10-14 nm as taught at (0125) with the reasonable expectation of forming a useful recording medium. Further, it would have been obvious to form the upper protective layer of ZnS-SiO<sub>2</sub> to have a thickness of from 1-9 nm based on the disclosure at (0143) and with a reasonable expectation of success.

The examiner notes that for the purposes of the embodiment bounded by claim 2, in particular, the 95 nm ZnS-SiO<sub>2</sub> Layer is considered to be a composite

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of a thicker layer and one having a thickness of less than 10 nm, noting the disclosure of the instant specification at page 8 where the composition of layer 3 and 5 are both  $\text{ZnS-SiO}_2$

And noting the claims do not address other layers between the Ag layer and the recording layer until claims 9-11. The claims do not preclude the embodiment like that disclosed on page 8 of the instant specification.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ANNA L. VERDERAME whose telephone number is (571)272-6420. The examiner can normally be reached on M-F 8A-4:30P.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Huff can be reached on (571)272-1385. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Mark F. Huff/  
Supervisory Patent Examiner, Art Unit 1795

/Anna L Verderame/  
Examiner, Art Unit 1795